REMARKS

The amendment to claim 1 is supported by the original disclosure at page 6, 2nd paragraph, lines 10-14, page 6, 3nd paragraph, lines 1-3, by Figure 6 and by original claims 3 - 6 which have been canceled. The amendment to claims 8 and 9 is supported by the original disclosure at page 8, lines 1-2. The amendment to claims 12-13 and 15 corrects a lack of antecent basis for "liquid".

Applicants submit that the amendment of claims 8 and 9 based on the original specification addresses the objection to the specification under 37 CFR 1.75(d)(1) and MPEP 608.01(o).

Applicants submit that the amendment to claims 12-13 and 15 addresses the lack of antecent basis in as much as their now parent claim 2 refers to liquid. Applicants submit that the claims are now in compliance with 35 USC 112, second paragraph.

The invention centers on methods for microaligning small parts such as MEMs in a manner that does not require finely precise alignment machinery. The method of the invention relies on the use of at least three pad pairs between parts and wetting phenomenon established between the pad pairs and a liqufied glue (especially a metallic solder). The pad pairs include specifically configured pads such that an X-Y and rotational self-alignment can occur upon wetting.

Desai et al. (US Pat 5170931) discloses a process for mounting a flexibile film carrier on a circuitized substrate. While Desai et al. indicates that the bonding pads can be of any size or shape, Desai et al. does not disclose or suggest the specifically claimed pad configuration, nor that selection of such configuration will result in an X-Y and rotational self-alignment. Applicants

submit that these results are not expected from the teaching of Desai et al. which effectively says that the choice of pad configuration is not critical to achieving any effect apart from avoiding electrical shorts and spatial conflicts with spacers.

Hauer et al. (US Pat 6125043) discloses a circuit boar arrangement using spacers to establish standoffs. Hauer et al. does not disclose or suggest the specifically claimed pad configuration, nor that selection of such configuration will result in an X-Y and rotational self-alignment. Thus, applicants submit that the combination of Desai et al. with Hauer et al. would not render use of such configuration obvious.

Nishikawa et al. (US 2003/0092326 A1) discloses the application of mechanical force to assist in the bonding of components in an electronic package. Nishikawa et al. does not disclose or suggest the specifically claimed pad configuration, nor that selection of such configuration will result in an X-Y and rotational self-alignment. Thus, applicants submit that the combination of Desai et al. with Nishikawa et al. would not render use of such configuration obvious.

For the above reasons, applicant submits that the pending claims are patentable over the prior art of record and that the application is in condition for allowance. Such allowance is earnestly and respectfully solicited.

Respectfully submitted,
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